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# PATENT SPECIFICATION



Application Date: Oct. 21, 1944. No. 17317/43.

578.697

(Patent of Addition to No. 556,351 dated Aug. 4, 1942).

Complete Specification Accepted: July 9, 1946.

## COMPLETE SPECIFICATION

### Improvements in Pipe Insulation Sections

I, HUGH ALEXANDER THOMSON, a British subject, of 85A, Lexham Gardens, Kensington, London, W.8, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to heat or cold insulating sections for application to pipe lines and is concerned with an improvement or modification of the heat insulating sections described and claimed in the parent Patent No. 556,351. It is the object of the present invention to afford means for fixing the heat insulating sections upon a pipe line.

In accordance with the invention a heat or cold insulating section comprises a sheet of insulating material, a superposed sheet of waterproofing material secured at (or near) one edge to said sheet of insulating material, and a further superposed sheet of wire netting secured to the waterproofing material at (or near) that edge of the latter remote from its place of fixation to the sheet of insulating material, whereby the superposed sheets may be wrapped around a pipe line with the wire netting as the outside layer to permit the free edge of such wire netting to be secured back to the part thereof which is already secured to the waterproof sheeting. It will be appreciated that the wire netting affords a fixing means for the insulating sections and forms a part thereof before they are applied to the pipe line. This permits a degree of prefabrication which reduces the labour of lagging pipes to a minimum.

For a better understanding of the nature of the invention and the manner in which the same may be carried into effect, reference will now be made to the accompanying drawings in which,

Figure 1 is a perspective view of an insulating section ready for application to a pipe line and,

Figure 2 is a perspective view showing the insulating section of Figure 1 in position upon a pipe line.

The insulating material in sheet form is indicated at 2 and it will be understood

that the material is of a flexible nature which will permit it to be readily wrapped around a pipe. The sheet 2 is made of such dimensions that it may be wrapped around a predetermined diameter of pipe so as completely to enclose the latter. Superposed upon the sheet of insulating material 2, is a sheet of stiffening material 3. The latter may for example be hard-board and it is cut so as to be of approximately the same size as the sheet 2. The next superposed sheet is the waterproofing material 4 and beyond it there is the superposed sheet of wire-netting 5.

The edges 8 of the sheets, 2, 3 and 4, are co-terminus and the sheet 4 is tacked or stapled through at (or near) this edge to the sheet of insulating material 2. The intermediate layer 3 is thus also secured to the insulating material 2. The other edge 0 of the sheet 4 remote from its place of fixation to the sheet of insulating material, is secured to the wire-netting 5. It will be observed from Fig. 1 that this edge of the sheet 4, as also the wire-netting 5, extends beyond the insulating material 2 and this permits the longitudinal overlapping shown in Fig. 2. It will however be noted that it is the free edge 9 of the wire-netting 5 which is drawn over the fixed edge 0. To secure this edge 9 of the wire-netting, it is woven fast into the mesh beneath by means of a crochet hook adapted for the purpose. In Fig. 2 a longitudinal overlap is shown and in order to illustrate the various superposed sheets the left hand ends of the sheets illustrated in that Figure have been shown bent back.

In order to obtain a circumferential overlap of the waterproof sheeting 4 and the wire-netting 5, the sheets are extended longitudinally beyond the length of the sheet 2 by an amount indicated at 6, in Fig. 1. The extent of circumferential overlap is further indicated at 1, in Fig. 1. In Fig. 2 the circumferential overlap is itself indicated at 6. By means of the circumferential and longitudinal overlapping, the joints are rendered waterproof and at the same time the insulating sections are held firmly upon the pipe line.

[Price 1/-]

Price 25p

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578,697

By arranging that the wire-netting is attached in the manner indicated at 0 to the waterproof sheeting whilst the waterproof sheeting is itself attached at its other edge to the insulating material 2, the possibility is afforded of producing prefabricated insulating sections of the kind indicated in Fig. 1 which may be readily applied to a pipe line in the manner indicated in Fig. 2.

The insulating sections described above are mainly intended for use upon outside pipe lines, but it will at once be appreciated that they may be employed for use upon inside pipe lines.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

1. A heat or cold insulating section for application to pipe lines, comprising a sheet of insulating material, a superposed sheet of waterproofing material secured at (or near) one edge to said sheet of insulating material and a further superposed sheet of wire-netting secured to the waterproofing material at (or near) that edge of the latter remote from its place of fixation to the sheet of insulating material, whereby the superposed sheets may be wrapped around a pipe line with the wire-netting as the outside layer to permit the free edge of such wire-netting to be secured back to the part thereof which is already secured to the waterproof sheeting.

2. A heat or cold insulating section as claimed in claim 1 wherein a sheet of stiffening material is placed between the

sheets of insulating and waterproof material and is secured thereto at the place where such sheets are secured one to the other.

3. A heat or cold insulating section as claimed in claim 1 or 2 wherein the sheet of waterproof material and the wire-netting extend beyond the sheet of insulating material so as to form a circumferential overlap when one of the sections is placed adjacent another upon a pipe line.

4. A heat or cold insulating section as claimed in any of the preceding claims wherein the sheet of waterproof material and the wire-netting extend beyond the sheet of insulating material in such manner as to afford a longitudinal overlap when the section is wrapped around a pipe line, whereby the free end of the overlapping wire netting may be secured back onto the adjacent meshes of the wire netting therebeneath.

5. A heat or cold insulating section as claimed in Claim 2 wherein the sheet of stiffening material consists of hardboard.

6. A heat or cold insulating section for application to pipe lines, constructed, arranged and adapted to operate as described hereinbefore with reference to the accompanying drawings.

Dated the 21st day of October, 1944.  
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Agents for the Applicant.

578,697 COMPLETE SPECIFICATION

1 SHEET

FIG. 2

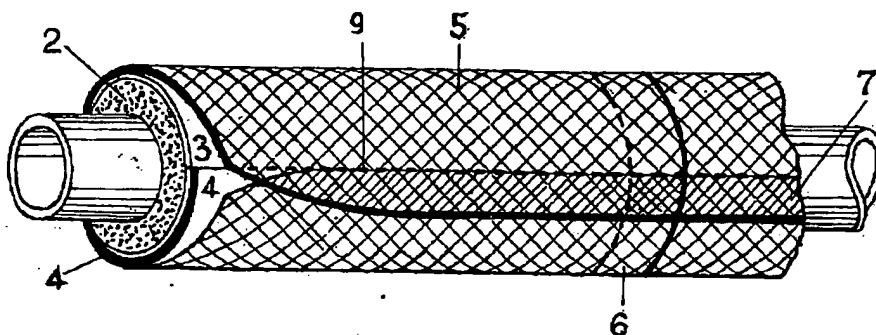
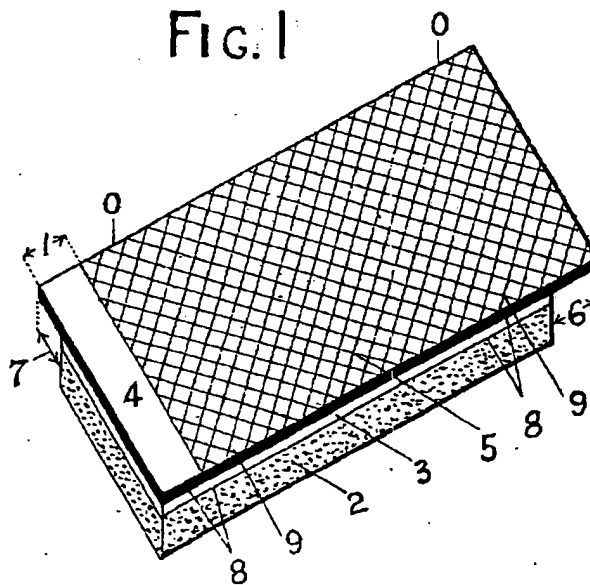


FIG. 1



[This Drawing is a reproduction of the Original on a reduced scale.]